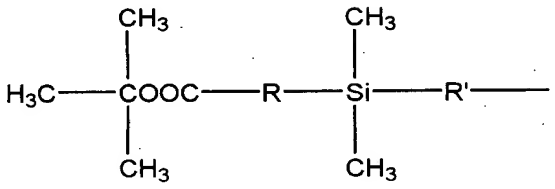
What is claimed is:

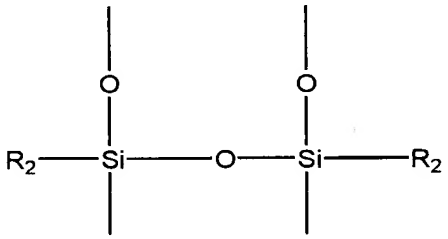
(1) Silicone resins wherein a triorganosilyl group represented by the following general formula (1)



(1)

(wherein R is a divalent organic group and R' is a divalent group or a direct bond) is linked to all or a part of the ends of the backbone chain of polyorganosilsesquioxanes.

(2) Silicone resins as described in claim 1 wherein the polyorganosilsesquioxanes contain a repeating unit represented by the following general formula (2)



(2)

(wherein R_2 is an unsubstituted or subsituted phenyl group) and the average number of repeating units is 2-5,000.

(3) Silicone resins as described in claim 1 wherein the polyorganosilsesquioxanes consist of one type or a mixture of two types or more selected from ladder type, cage type, and mixed cage-ladder type and

their weight average molecular weight Mw determined by gel permeation chromatography (GPC) and calibrated against polystyrene is 800-100,000.

(4) Silicone resins as described in claim 1 wherein the group R in the general formula (1) is $-R_1COOX_1-$ or $-R_1COOX_1-Si(CH_3)_2-O-$ (wherein R_1 is the divalent residue of a polycarboxylic acid or derivative thereof).

(5) A process for preparing silicone resins as described in claim 1 which comprises treating polyorganosilsesquioxanes with $X-Si(R_3)_2-Y$ or $X-Si(R_3)_2OSi(R_3)_2-Y$ (wherein X and Y are groups capable of linking to carboxyl groups or functional groups capable of reacting with the terminal OH or OM group (M is an alkali metal) and R_3 is a monovalent organic group) to give terminally modified polyorganosilsesquioxanes in which X or Y is present at all or a part of their ends, treating the terminally modified polyorganosilsesquioxanes with an acidic ester prepared by the reaction of t-butyl alcohol with a polycarboxylic acid or derivative thereof to give silicone resins in which the triorganosilyl group represented by the general formula (1) is linked to all or a part of the ends of the backbone of polyorganosilsesquioxanes.

(6) Photosensitive resin compositions comprising the silicone resins as described in any one of claims 1 to 4 and a photogenerator of acid.